# Dossier: TRANSCEND ROBOTICS INC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $171,877.45

**Award Date:** 2024-03-04

**Branch:** SOCOM

## AI-Generated Intelligence Summary

**Company Overview:**

Transcend Robotics Inc. designs, manufactures, and sells highly mobile robots for inspection, reconnaissance, and industrial applications, specializing in environments inaccessible to conventional robots. Their primary mission is to provide access to challenging terrains and confined spaces, reducing risk to human operators and improving operational efficiency. They aim to solve the problems of limited accessibility, hazardous environments, and the need for remote data collection in industries such as energy, infrastructure, and defense. Transcend Robotics' unique value proposition lies in their patented "OmniTraction" mobility platform, enabling superior maneuverability over obstacles, stairs, and uneven surfaces compared to traditional wheeled or tracked robots.

**Technology Focus:**

* OmniTraction™ Mobility Platform:\*\* A unique wheel-leg hybrid design allowing the robot to seamlessly transition between rolling, stepping, and climbing modes, overcoming obstacles up to 2x the wheel diameter. Data suggests the platform allows for traversal of terrain with slopes exceeding 45 degrees.
* ARLO™ Series Robots:\*\* Mobile robots built on the OmniTraction™ platform, customizable with various sensor payloads including visual cameras, thermal imaging, LiDAR, gas detectors, and communication systems. Robots are designed for remote operation and data collection in confined spaces and challenging environments.

**Recent Developments & Traction:**

* U.S. Air Force SBIR Phase II Contract (Awarded 2021):\*\* Development and testing of specialized ARLO robots for infrastructure inspection and maintenance at Air Force bases. Details scarce regarding contract value.
* Partnership with Boston Dynamics (Announced 2022):\*\* Integration of Transcend Robotics' OmniTraction platform into Boston Dynamics' Spot robot for enhanced mobility and access in challenging environments. This likely involves technology licensing and co-development.
* ARLO 150 Release (2023):\*\* Launched a new version of the ARLO robot, the ARLO 150, featuring improved payload capacity, extended battery life (up to 8 hours), and enhanced ruggedization for harsh environments.

**Leadership & Team:**

* Peter Gale, CEO:\*\* Prior experience includes executive roles at robotics and automation companies, demonstrating expertise in product development and commercialization. Details are sparse, but past positions included work at Seegrid.
* Carl Vause, CTO:\*\* Technical leader with experience in robotic systems design and embedded software development. Details on prior roles are limited in available online sources.

**Competitive Landscape:**

* Boston Dynamics:\*\* While they are also a partner, Boston Dynamics produces highly capable robots like Spot, which targets similar applications, though Spot lacks OmniTraction's specialized mobility advantages in extreme terrain.
* Clearpath Robotics:\*\* Offers a range of mobile robotic platforms for research and development, as well as industrial applications. Clearpath's focus is broader, while Transcend is more specialized on extreme mobility.

**Sources:**

1. [https://www.transcendrobotics.com/](https://www.transcendrobotics.com/) - Company Website

2. [https://www.therobotreport.com/news-transcend-robotics-develop-arlod-for-air-force/](https://www.therobotreport.com/news-transcend-robotics-develop-arlod-for-air-force/) - Robotics Report Article on Air Force Contract

3. [https://www.youtube.com/watch?v=I82Yx5M6Y\_c](https://www.youtube.com/watch?v=I82Yx5M6Y\_c) - Promotional Video (Reveals Performance Characteristics)

4. [https://www.businesswire.com/news/home/20220830005235/en/Transcend-Robotics-Partners-with-Boston-Dynamics](https://www.businesswire.com/news/home/20220830005235/en/Transcend-Robotics-Partners-with-Boston-Dynamics) - Business Wire Press Release on Boston Dynamics Partnership